Utah Vital Statistics: Quarterly Report

Third Quarter 2003

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Produced by the Statistics Products Section
Office of Vital Records and Statistics

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Mission Statement

The Office of Vital Records and Statistics administers the statewide system of Vital Records and Statistics by documenting and certifying the facts of births, deaths, and family formation for the legal purposes of the citizens of Utah, participates in the National Vital Statistics System, and responds to the needs of health programs, health care providers, businesses, researchers, educational institutions and the Utah public for data and statistical information.

Source of Data

Vital statistics birth and death certificates are required by law to be filed with the state Office of Vital Records and Statistics and are the primary source of data presented in this report. These birth and death data are provisional until published in the annual report, Utah's Vital Statistics: Births and Deaths (Year).

Table of Contents

Births, deaths, infant deaths, stillbirths, and population by health district, residents: Utah, third quarter 2003

Health district County	Population Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number
Total	2,338,762	12,976	37,871	3,070	9,544	45	152	60	191
Bear River	141,322	883	2,511	185	554	6	11	5	11
Box Elder	43,812	242	639	73	218	1	1	1	2
Cache	95,460	635	1,848	111	332	5	10	4	9
Rich	2,050	6	24	1	4	0	0	0	0
Central Utah	67,673	303	896	140	430	1	3	1	4
Juab	8,643	45	141	17	47	1	1	0	1
Millard	12,335	53	158	19	80	0	1	0	0
Piute	1,409	2	13	7	17	0	0	0	0
Sanpete	23,550	99	296	43	133	0	0	0	2
Sevier	19,232	92	260	50	134	0	1	0	0
Wayne	2,504	12	28	4	19	0	0	1	1
Davis	250,265	1,410	4,115	269	873	8	17	8	23
Salt Lake	927,564	4,768	13,871	1,215	3,804	12	49	24	73
Southeastern	53,082	196	566	103	335	1	4	2	4
Carbon	19,858	89	242	52	178	0	1	1	2
Emery	10,540	40	128	26	61	1	1	1	1
Grand	8,468	14	58	11	42	0	0	0	0
San Juan	14,216	53	138	14	54	0	2	0	1
Southwest	152,960	826	2,422	280	787	0	10	1	6
Beaver	6,285	35	102	17	44	0	1	0	0
Garfield	4,599	14	52	11	31	0	2	0	0
Iron	35,507	212	616	50	150	0	3	1	2
Kane	5,958	21	57	10	27	0	0	0	0
Washington	100,611	544	1,595	192	535	0	4	0	4
Summit	32,236	118	397	11	64	1	2	1	4
Tooele	46,208	289	837	66	175	3	6	0	2
Tri-County	41,756	194	604	63	216	1	2	3	4
Daggett	916	1	10	0	3	0	0	0	0
Duchesne	14,856	70	228	17	78	1	1	1	1
Uintah	25,984	123	366	46	135	0	1	2	3
Utah County	398,056	2,790	8,231	404	1,282	11	32	7	39
Wasatch	16,847	96	280	23	57	0	1	1	1
Weber-Morgan	210,793	1,103	3,141	311	967	1	15	7	20
Morgan	7,416	31	88	8	27	0	0	1	1
Weber	203,377	1,072	3,053	303	940	1	15	6	19

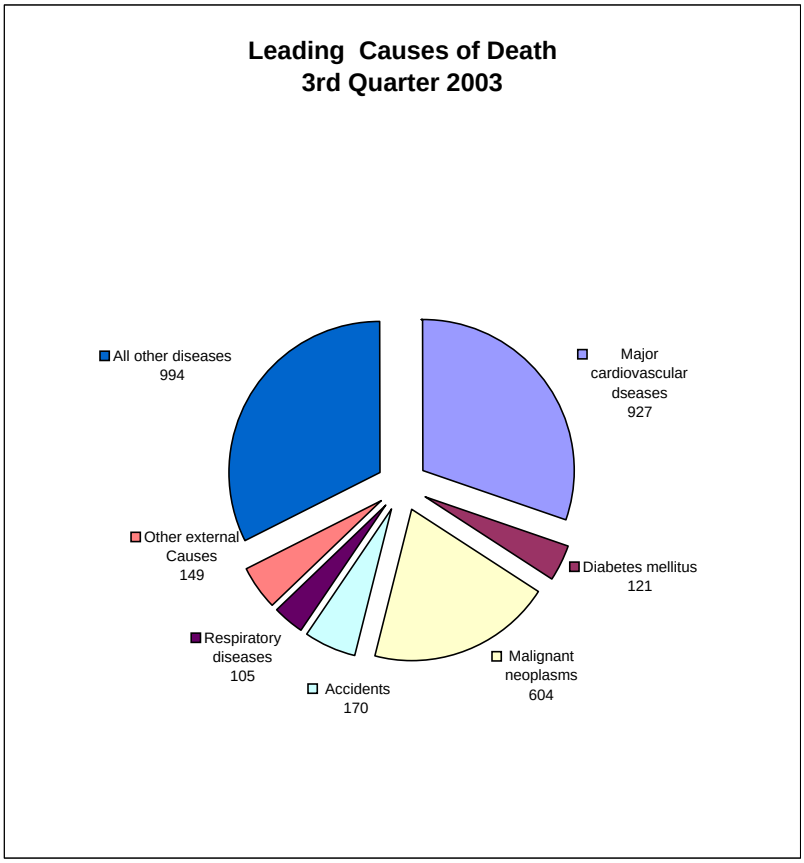
Births, c-sections, gestation under 37 weeks, mothers under 20 years of age, and low birthweight by county of residence: Utah, third quarter 2003

Health district County	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number
Total	12,976	37,871	2,467	7,278	1,223	3,493	877	2,479	877	2,493
Bear River	883	2,511	146	409	98	243	46	150	46	150
Box Elder	242	639	44	110	23	50	17	50	17	50
Cache	635	1,848	101	295	74	189	29	100	29	100
Rich	6	24	1	4	1	4	0	0	0	0
Central Utah	303	896	70	209	31	90	31	90	31	89
Juab	45	141	8	22	4	14	3	9	3	9
Millard	53	158	16	49	3	10	5	14	5	14
Piute	2	13	1	5	0	0	0	1	0	1
Sanpete	99	296	17	63	9	38	11	34	11	34
Sevier	92	260	24	63	13	24	11	31	11	30
Wayne	12	28	4	7	2	4	1	1	1	1
Davis	1,410	4,115	274	791	148	405	78	218	78	221
Salt Lake	4,768	13,871	909	2,760	416	1,247	342	987	342	992
Southeastern	196	566	50	141	23	57	24	66	24	66
Carbon	89	242	22	63	12	27	12	37	12	37
Emery	40	128	9	32	5	18	4	11	4	11
Grand	14	58	4	10	3	4	1	3	1	3
San Juan	53	138	15	36	3	8	7	15	7	15
Southwest	826	2,422	130	367	74	223	67	190	67	191
Beaver	35	102	4	19	0	8	2	9	2	9
Garfield	14	52	1	9	1	6	1	3	1	3
Iron	212	616	31	94	18	55	20	54	20	54
Kane	21	57	2	7	2	5	0	5	0	5
Washington	544	1,595	92	238	53	149	44	119	44	120
Summit	118	397	19	79	17	43	4	25	4	25
Tooele	289	837	56	178	29	101	20	53	20	53
Tri-County	194	604	44	120	17	53	25	84	25	84
Daggett	1	10	0	2	0	17	0	0	0	0
Duchesne	70	228	16	50	7	7	9	29	9	29
Uintah	123	366	28	68	10	29	16	55	16	55
Utah County	2,790	8,231	486	1,424	241	672	109	309	109	311
Wasatch	96	280	20	62	12	27	7	21	7	21
Weber-Morgan	1,103	3,141	263	738	117	332	124	286	124	290
Morgan	31	88	7	21	3	12	0	1	0	1
Weber	1,072	3,053	256	717	114	320	124	285	124	289

Deaths due to unnatural causes by county of residence: Utah, third quarter 2003

Health district / County	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number	3rd Qtr Number	YTD Number
Total	3,070	9,544	319	921	86	194	84	264	10	40	80	252	59	171
Bear River	185	554	15	48	5	14	3	16	1	2	4	12	2	4
Box Elder	73	218	5	23	1	5	1	8	0	0	3	9	0	1
Cache	111	332	10	25	4	9	2	8	1	2	1	3	2	3
Rich	1	4	0	0	0	0	0	0	0	0	0	0	0	0
Central Utah	140	430	17	51	8	12	5	18	0	0	4	21	0	0
Juab	17	47	1	2	1	1	0	1	0	0	0	0	0	0
Millard	19	80	3	12	1	2	0	3	0	0	2	7	0	0
Piute	7	17	2	2	2	2	0	0	0	0	0	0	0	0
Sanpete	43	133	6	19	1	3	3	10	0	0	2	6	0	0
Sevier	50	134	4	13	2	3	2	3	0	0	0	7	0	0
Wayne	4	19	1	3	1	1	0	1	0	0	0	1	0	0
Davis	269	873	25	71	6	14	9	23	0	3	5	15	5	16
Salt Lake	1,215	3,804	133	378	23	60	31	99	8	24	44	117	27	78
Southeastern	103	335	14	37	4	9	6	12	0	0	2	10	2	6
Carbon	52	178	6	16	2	3	1	2	0	0	1	6	2	5
Emery	26	61	3	9	1	3	2	3	0	0	0	2	0	1
Grand	11	42	2	5	0	1	2	3	0	0	0	1	0	0
San Juan	14	54	3	7	1	2	1	4	0	0	1	1	0	0
Southwest	280	787	33	66	13	17	6	17	0	1	6	14	8	17
Beaver	17	44	0	3	0	2	0	0	0	0	0	0	0	1
Garfield	11	31	2	4	0	0	0	1	0	1	2	2	0	0
Iron	50	150	6	11	2	2	2	4	0	0	0	0	2	5
Kane	10	27	1	4	0	0	1	1	0	0	0	1	0	2
Washington	192	535	24	44	11	13	3	11	0	0	4	11	6	9
Summit	11	64	1	9	0	2	0	1	0	1	0	2	1	3
Tooele	66	175	4	13	1	4	2	3	0	1	1	3	0	2
Tri-County	63	216	9	26	3	7	2	7	0	1	4	7	0	4
Daggett	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Duchesne	17	78	1	8	0	2	1	3	0	1	0	1	0	1
Uintah	46	135	8	18	3	5	1	4	0	0	4	6	0	3
Utah	404	1,282	44	141	13	35	14	45	0	4	7	30	10	27
Wasatch	23	57	1	4	1	1	0	3	0	0	0	0	0	0
Weber-Morgan	311	967	23	77	9	19	6	20	1	3	3	21	4	14
Morgan	8	27	2	6	0	1	2	4	0	0	0	1	0	0
Weber	303	940	21	71	9	18	4	16	1	3	3	20	4	14

Figure 1


Leading Causes of Death
3rd Quarter 2003
All other diseases
994
Major
cardiovascular
dseases
927
Other external
Causes
149
Diabetes mellitus
121
Respiratory
diseases
105
Malignant
neoplasms
604
Accidents
170

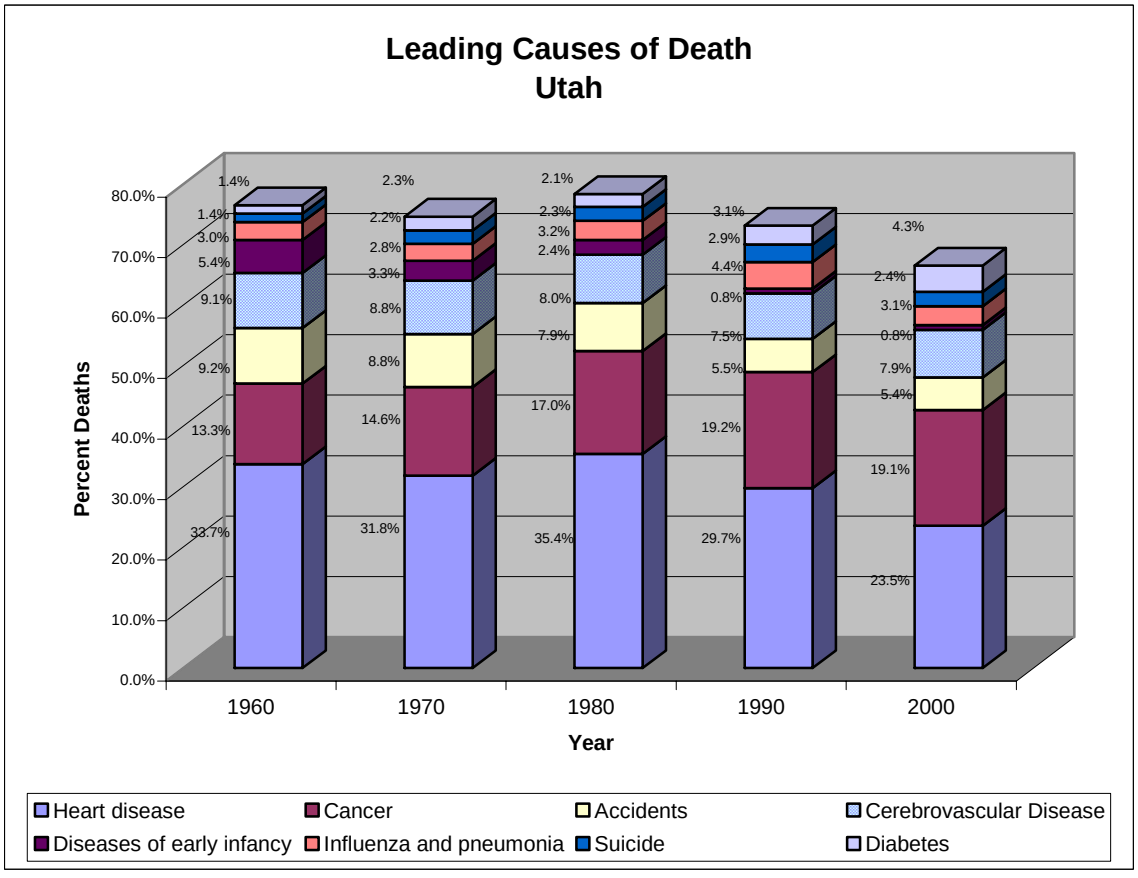
Utah Vital Statistics: A Historical Review

Utah Vital Statistics: A Historical Review presents an overview of selected public health trends in Utah using data from Utah birth and death certificates. These data may be available for approved research projects. For more information or to request data, please contact the Utah Office of Vital Records and Statistics.

Leading Causes of Death

Over the past 40 years, new programs and technologies have developed to improve health and prevent deaths. Observing trends in vital records data can show successes of public health programs and areas that require more effort. Figure 1 shows some of the successes public health has experienced over time. Since 1960 there have been significant decreases in the proportion of deaths due to heart disease, unintentional injuries, cerebrovascular disease (stroke), and diseases of early infancy. On the other hand, the percent of deaths due to diabetes and cancer have increased. Figure 1 also shows a decline in heart disease from 1960 to 2000, with the most significant change in 1980.

Figure 1



Using data to identify leading causes of death for sub-populations allows programs to be designed to target a specific age, gender, race/ethnicity, or geographic area. Following is a brief look at the leading causes of death for each of these sub-groups using death data from the years 1960 and 2000.

The 1960 and 2000 underlying cause of death codes were assigned by different coding structures and the data may reflect these differences. The 1960 codes for underlying cause of death are from the Seventh Revision of the International Classification of Disease (ICD-7). The list has undergone three revisions and in 2000, the ICD-10 coding system is used

Leading Causes of Death by Gender

The leading cause of death for both males and females in 1960 and 2000 was heart disease. Fewer women died of heart disease than men in 1960, 1,220 men (34.1 %) compared to 805 women (33.1 %). The number of deaths due to heart disease has become more even in 2000, 1,474 men (23.8%) and 1,430 women (23.3%). Deaths due to cancer increased at a lower rate for females than males from 1960 to 2000. The percent of deaths due to cancer for females rose from 15.3 to 18.3 percent but jumped from 12 to 20 percent for males. Women were less likely to die from unintentional injuries than men. The number of deaths from unintentional injuries decreased slightly less for females than for males, 3.3 compared to 3.6 percent, from 1960 to 2000. Figures 2 and 3 depict the percent of deaths due to specific causes by gender in 1960 and 2000, respectively.

Figure 2

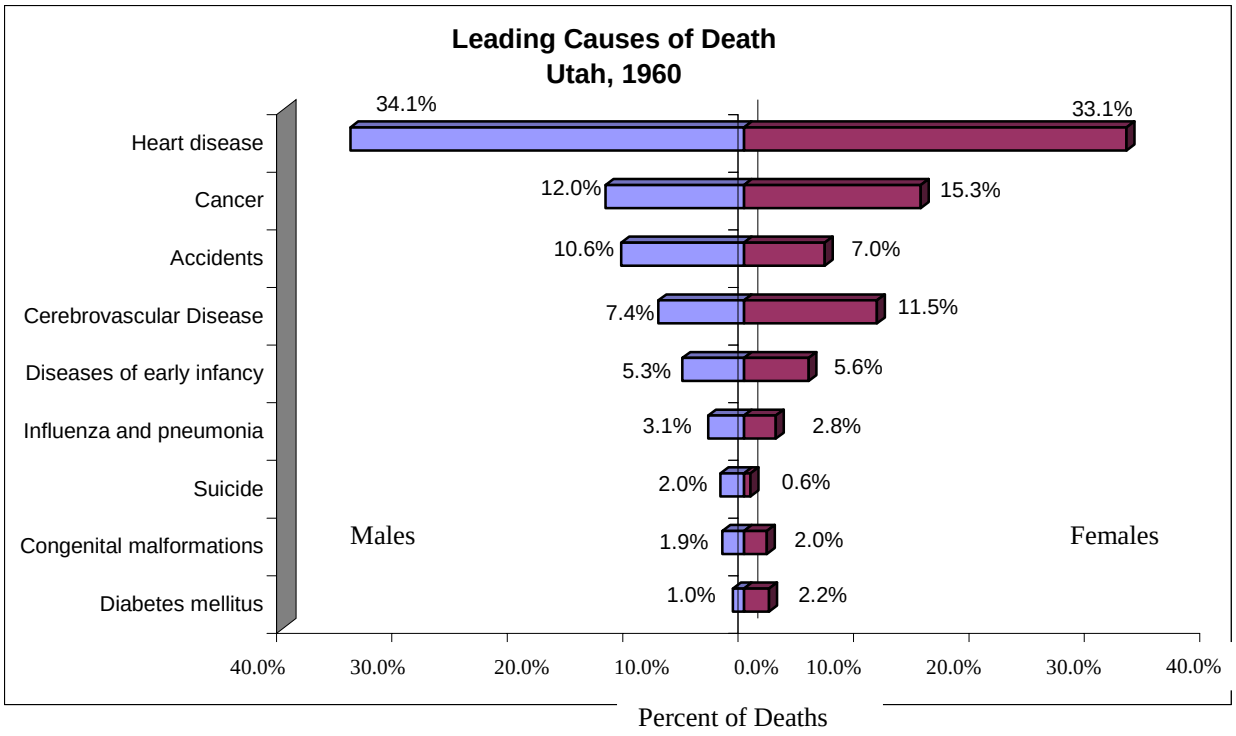
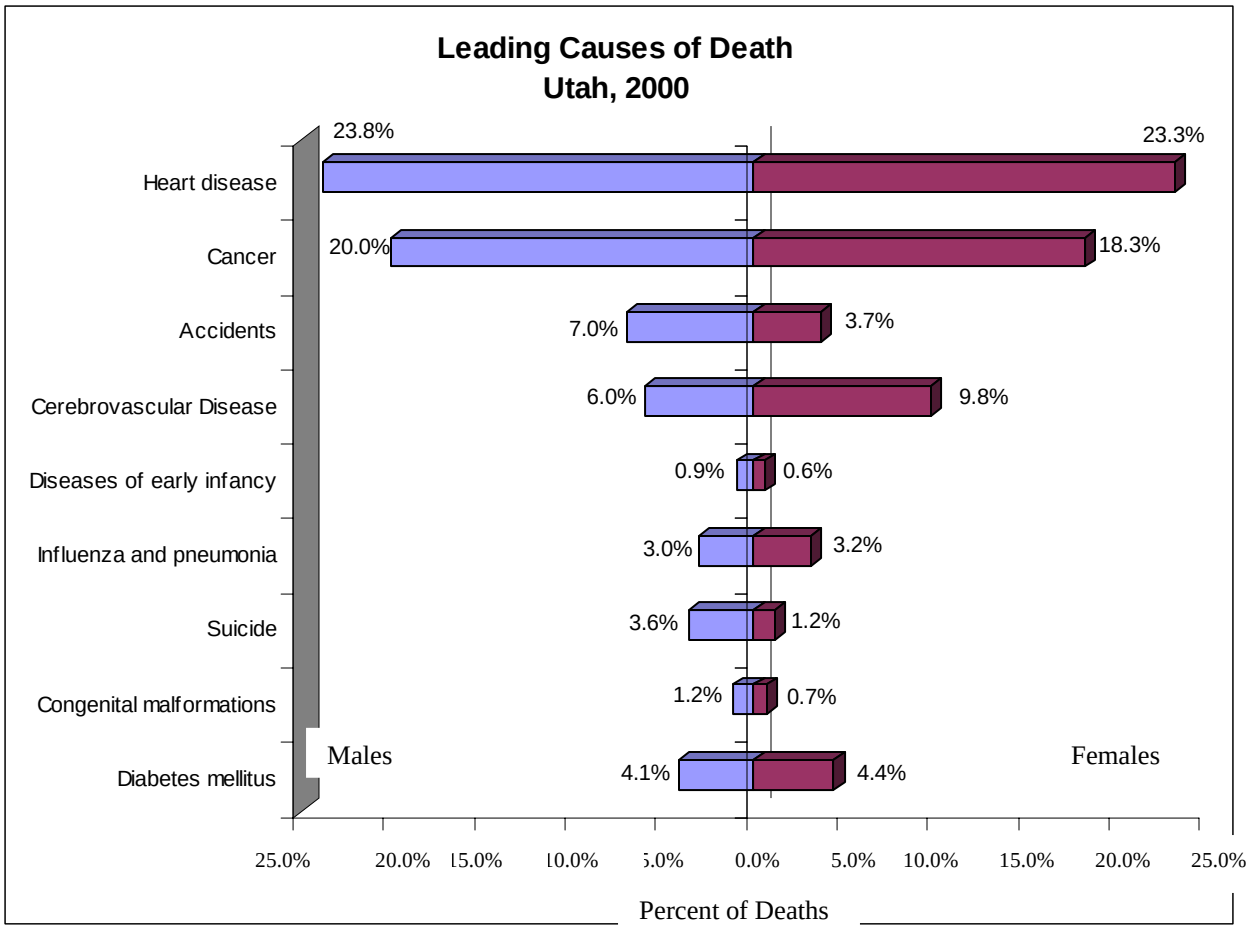


Figure 3



Leading Causes of Death by Age

Leading causes of death vary greatly depending on the age group. Unintentional injuries were the leading cause of death for those ages 1-44 years and were third for those less than one year in age and 45 to 64 years in age. As the population ages, the percent of deaths due to heart disease and cancer increases. Table 1 shows the leading causes of death for various age groups for the years 1960 and 2000. Since 1960, deaths due to unintentional injuries have decreased for all age groups as has heart disease. Deaths to those less than one year of age have also decreased significantly since 1960. In 1960, 62.8 percent of deaths to children less than one year of age were due to diseases of early infancy. Forty years later, that number has been reduced to 39 percent.

Table 1

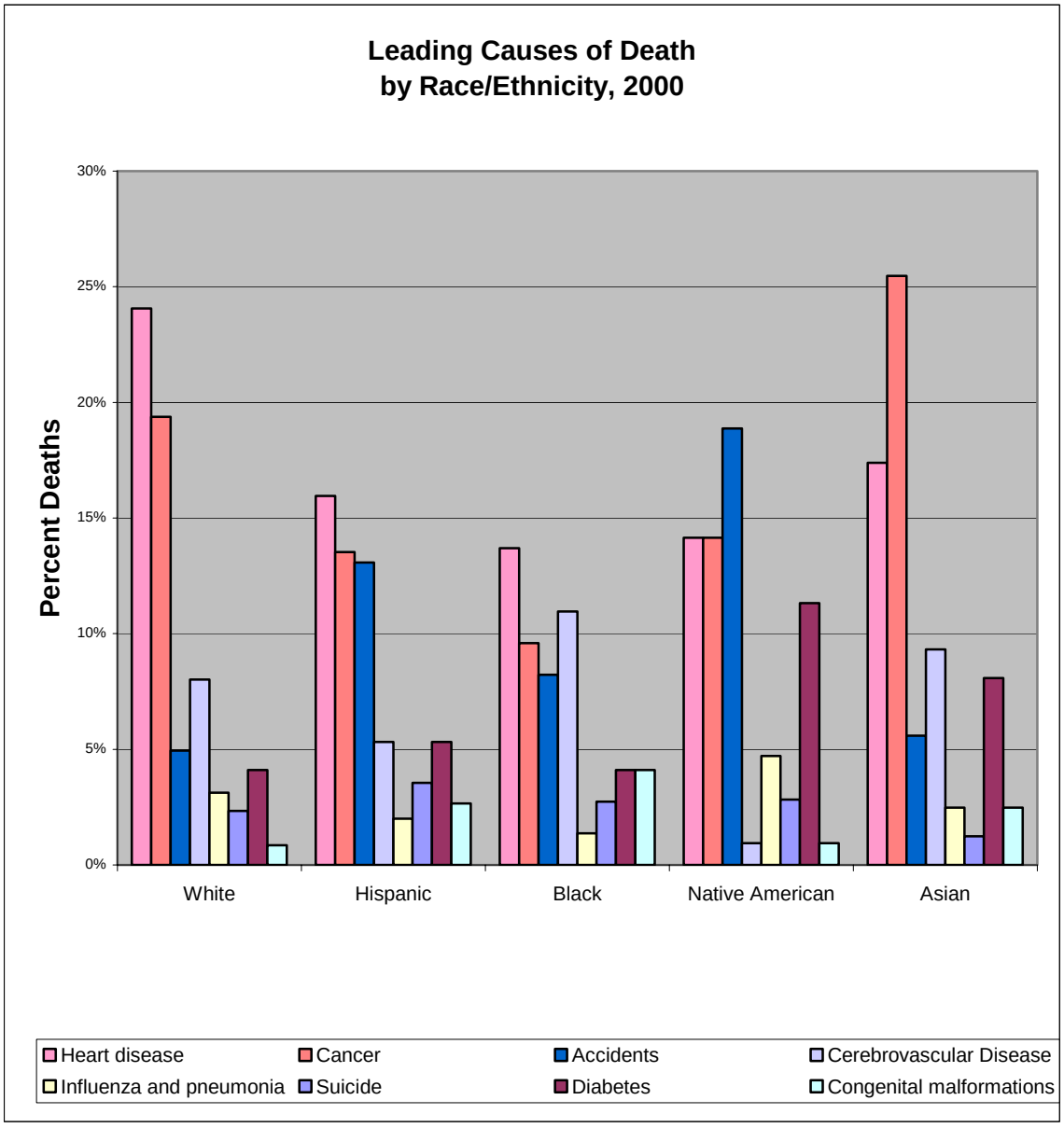
Percent of Deaths – Utah, 1960 and 2000

Age in Years	Cause of Death	Percent of Deaths	
		1960	2000
Less than 1 year	Diseases of early infancy	62.76 %	38.93 %
	Congenital malformations	16.12 %	32.79 %
	Unintentional injuries	5.95 %	3.28 %
	Heart disease	0.00 %	2.46 %
1-14	Unintentional injuries	39.07 %	38.32 %
	Cancer	13.95 %	13.08 %
	Congenital malformations	9.30 %	11.21 %
	Suicide	0.00 %	4.67 %
15-24	Unintentional injuries	59.7 %	49.1 %
	Suicide	8.1 %	22.0 %
	Cancer	8.1 %	5.8 %
	Heart disease	1.3 %	3.6 %
25-44	Unintentional injuries	30.5 %	20.1 %
	Suicide	6.1 %	15.5 %
	Cancer	13.1 %	14.6 %
	Heart disease	19.2 %	8.7 %
45-64	Cancer	20.7 %	30.6 %
	Heart disease	36.1 %	19.9 %
	Unintentional injuries	6.9 %	6.9 %
	Diabetes mellitus	1.7 %	4.8 %
65-84	Heart disease	43.4 %	25.1 %
	Cancer	13.9 %	23.1 %
	Cerebrovascular Disease	13.0 %	8.7 %
	Chronic lower respiratory disease	0.0 %	6.0 %
85+	Heart disease	43.5 %	30.3 %
	Cerebrovascular Disease	17.9 %	11.7 %
	Cancer	7.0 %	10.2 %
	Influenza and pneumonia	2.8 %	5.5 %

Leading Causes of Death by Race/Ethnicity

Utah has a predominately white population and therefore, leading causes of death for the whites do not vary greatly from that of the general population. Figure 4 shows the percent of deaths due to a specific cause by race/ethnicity in 2000. Native Americans and Blacks have a higher percent of deaths due to unintentional injuries than do other races/ethnicities. Native Americans also have a higher percent of deaths as a result of diabetes while Asians have the highest percent of cancer related deaths.

Figure 4

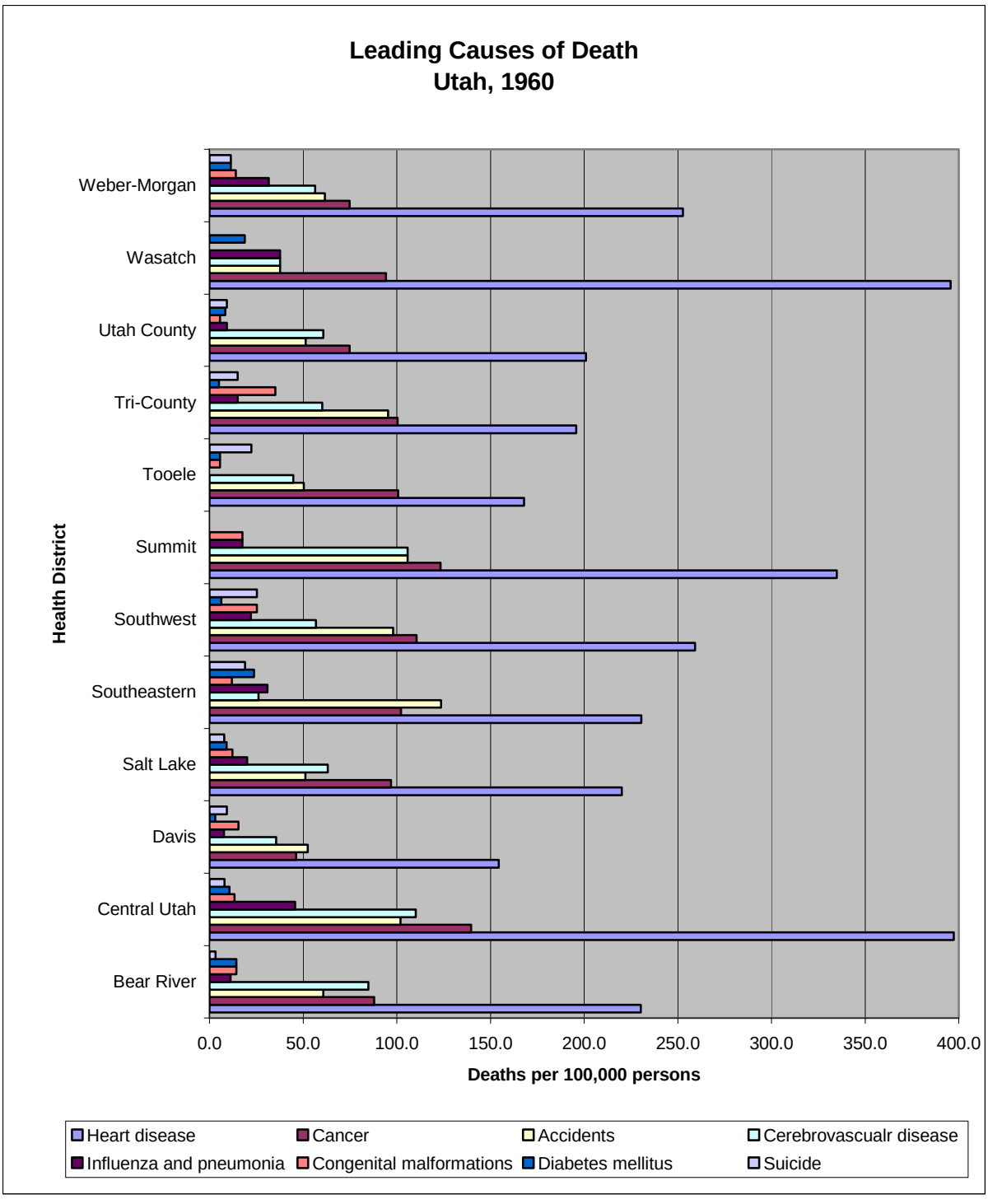


Note: In 1960, race/ethnicity was not collected therefore there is no data available.

Leading Causes of Death by Health District – 1960

Death rates vary by geographic location. Heart disease was the leading cause of death in all health districts in 1960. The rates were highest in the Wasatch and Central Utah Health Districts. Central Utah also had the highest rate of cancer deaths.

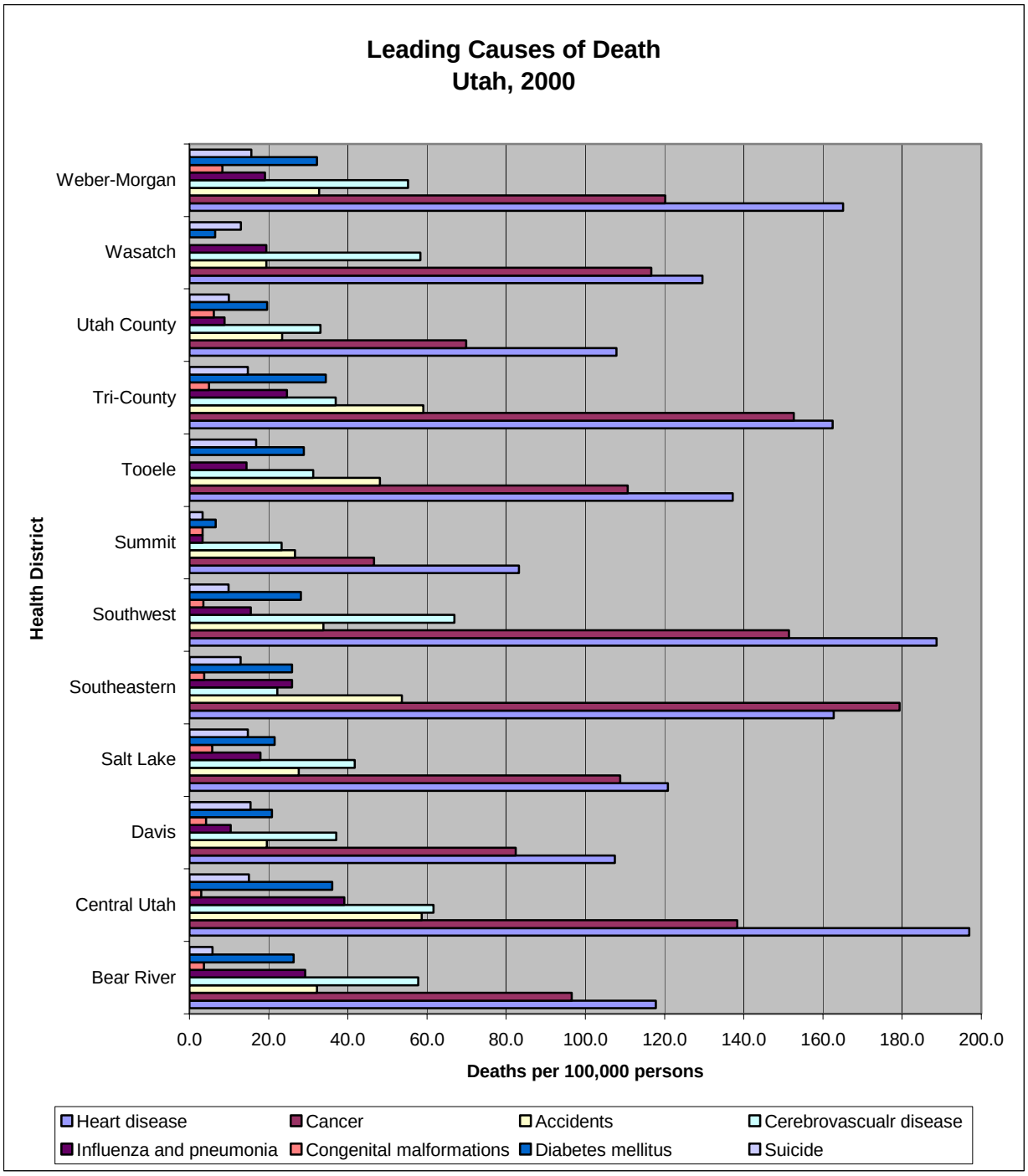
Figure 5



Leading Cause of Death by Health District – 2000

As mentioned previously, the rate of deaths due to heart disease decreased while cancer increased from 1960 to 2000. This is again evident in Figure 6. However, there was a slight shift in the prominence of heart disease in some health districts. Wasatch and Central Utah health districts have had the greatest reduction of heart disease.

Figure 6



Conclusion

A public health goal is to reduce the number of preventable deaths by targeting programs to groups at risk. The analysis of death data can identify leading causes of death for sub-populations like gender, age, race/ethnicity and geographic location. Comparing historic and current data is one way to measure the effectiveness of medical advances and public health awareness and education. Deaths due to heart disease and unintentional injuries have been greatly reduced over the past 40 years. Diseases of early infancy are no longer a leading cause of death. Data research and analysis leads to a better understanding of past events and is used to identify areas where future resources and attention can be focused.